

SYSTEMS AND METHODS FOR RETROSPECTIVE  
INTERNAL GATING

ABSTRACT OF THE DISCLOSURE

A method for retrospective internal gating is described. The method includes acquiring images at multiple z-locations  $z_1 \dots z_n$  and at different times  $t_1 \dots t_n$  at each of the z-locations, and reordering the images at at least one of the z-locations to obtain a synchronized image set.